# REPORT DOCUMENTATION PAGE

*Form Approved*
**OMB No. 0704-0188**



| 1. REPORT DATE *(DD-MM-YYYY)* | 2. REPORT TYPE | 3. DATES COVERED *(From - To)* |
|---|---|---|
| 30-03-2012 | Master of Military Studies Research Paper | September 2011 - March 2012 |

**4. TITLE AND SUBTITLE**
21ST CENTURY COMBAT POST-TRAUMATIC STRESS: AN EFFECTIVE AND RESILIENT MILITARY FORCE

**5a. CONTRACT NUMBER**
N/A

**5b. GRANT NUMBER**
N/A

**5c. PROGRAM ELEMENT NUMBER**
N/A

**6. AUTHOR(S)**
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**5d. PROJECT NUMBER**
N/A

**5e. TASK NUMBER**
N/A

**5f. WORK UNIT NUMBER**
N/A

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**
USMC Command and Staff College
Marine Corps University
2076 South Street
Quantico, VA 22134-5068

**8. PERFORMING ORGANIZATION REPORT NUMBER**
N/A

**9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)**
N/A

**10. SPONSOR/MONITOR'S ACRONYM(S)**
N/A

**11. SPONSORING/MONITORING AGENCY REPORT NUMBER**
N/A

**12. DISTRIBUTION AVAILABILITY STATEMENT**
Unlimited

**13. SUPPLEMENTARY NOTES**
N/A

**14. ABSTRACT**
The risks and sacrifices of military service members are great. Some men and women will return home from war and resume a normal life with a greater appreciation for the experience they had to endure. However, some members will not return so lucky. Over the past decade of fighting in two different theaters, this nation has learned a great deal about PTSD that have resulted in effective treatment programs and resilience training to help service members and their families restore their lives. Senior military leaders must ensure their frequent involvement and focus their attention and efforts in three distinct areas in order to ensure today's service members, diagnosed with PTSD, are reintegrated into the ranks to maintain an effective military force: 1) oversight and advocacy, 2) policy, and 3) professional education and resilience training.

**15. SUBJECT TERMS**
PTSD, RESILIENCE TRAINING, OSCAR TEAMS, COMPOUNDING PROBLEMS ASSOCIATED WITH PTSD, SERVICE MEMBERS DIAGNOSED WITH PTSD, SENIOR MILITARY LEADERS, STIGMA WITH PTSD, PTSD SYMPTOMS, RE-EXPERIENCING, HYPERAROUSAL, AVOIDANCE,

| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON |
|---|---|---|---|---|---|
| a. REPORT | b. ABSTRACT | c. THIS PAGE | | | Marine Corps University / Command and Staff College |
| Unclass | Unclass | Unclass | UU | | 19b. TELEPONE NUMBER *(Include area code)* (703) 784-3330 (Admin Office) |

United States Marine Corps
Command and Staff College
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MASTER OF MILITARY STUDIES

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TITLE:

# 21ST CENTURY COMBAT POST-TRAUMATIC STRESS: AN EFFECTIVE AND RESILIENT MILITARY FORCE

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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## Executive Summary

**Title:** 21st Century Combat Post-Traumatic Stress: An Effective and Resilient Military Force

**Author:** Major Brooks, Michael L., United States Marine Corps

**Thesis**: A critical nonbiased analysis of the policies, treatment, and advocacy of today's service members diagnosed with post traumatic stress disorder provides insight in three specific areas that senior military leaders should focus their attention and actions: oversight and advocacy, policy and professional education, and resilience training.

**Discussion:** For the past decade this nation has been at war. And yet, thousands of young men and women continue to volunteer their services everyday in order to protect this great nation. Thousands of service members have deployed to Iraq and Afghanistan and thousands have returned home not the same as before they left. The history of PTSD has had a turbulent journey and has had affects that are still present today. Being able to identify and start treating PTSD symptoms early is vitally important for today's service members. Early intervention can often times assist the service member with managing this disorder before conditions worsen and lead to greater consequences. Unfortunately, there are a discouraging number of veterans and active duty service members in this nation with PTSD, with more than eight hundred thousand diagnosed and countless others who have not sought help as thousands of Soldiers and Marines continue to return home from war. These numbers will cause a seismic shift, not only within the Armed Forces but also throughout society in sheer economic costs in health care and loss of human capital.

Over the past decade of fighting in two different theaters, this nation has learned a great deal about PTSD that have resulted in effective treatment programs and resources to help service members and their families restore their lives. Education and resilience training will maintain the force. Education does not just include the service members, but that of mental health professionals as well. DoD need to ensure that the services maintain psychologists/psychiatrists and nurse practitioners who are properly trained and certified in order to provide quality care services. Advanced progress in education amongst professional military, medical, and private sector personnel will facilitate a structured, long term, holistic fitness program that will build upon the development and enhance the performance of today's military service member and further improve and strengthen American military forces.

**Conclusion**: A lack of centralized oversight and collaborative and coordinated efforts between not only DoD and the VA, but also that of the private sector, will only extend the gaps in treatment of today's service members and veterans. With a security environment where the enemy has no boundaries and the increase in combat rotations, sustaining the quality of the military forces in the form of personnel and resilience to combat stressors is a task only senior military leaders can guarantee.

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# Preface

The following thesis is a result of both the author's experience as a Liaison Officer for the U.S. Marine Corps, Wounded Warrior Regiment, to the Department of Veterans Affairs (VA), Central Office, Washington, D.C. from June 2007 to June 2009; and his loving memories of two uncles who fought in the Vietnam War, both of whom took their lives years after returning home. This analysis would not have been possible without the support and guidance of Dr. Donald F. Bittner, Ph.D., Professor of History, Command and Staff College, Marine Corps University. The conversation held in these pages is an attempt to extend both, the focus of our senior military leaders, and the collaborative efforts between Department of Defense (DoD), VA, and the private sector on our service members diagnosed with post traumatic stress disorder (PTSD). Although it mentions common symptoms and diagnosis identification, it is not a medical investigation but more of an analysis of current policy and treatment programs.

The risks and sacrifices of military service members are great. Some service men and women will return home and resume a normal life with a greater appreciation for the experience they had to endure. However, some will not be so lucky – and it is for that reason that we, as a nation, must do everything possible to assist with their recovery and reintegration within our armed services and the community. A service-member diagnosed with PTSD does not translate into being at the end of the road for future military service. It is quite the opposite.

# Introduction

Senior military leaders have always been held responsible and accountable for the success or failure of their service or command. For years they have created both strategic operational design and policies to ensure future success and survival of their particular service. So why is it important at this time to direct their attention towards 21st century post traumatic stress disorder? With over a decade of war coming to an end, a shrinking federal budget mandating reductions in military spending, a reshaping of the Armed Forces, and a new focus in the Asia Pacific, it would appear that senior leaders have enough on which to concentrate. A *Washington Post* article dated 11 February 2012by Greg Jaffe, titled "*Marine's Suicide Is Only Start of Family's Struggle*", describes a stellar Marine Major who had an outstanding military career. Major Hackett retired after 26 years of service, and shortly afterwards, shot himself to death in a parking lot.

Unfortunately, both the Marine Corps and the Department of Veterans Affairs failed to identify or diagnose that Major Hackett may have been suffering from post traumatic stress disorder after serving two tours and being injured in Iraq. Prior to Major Hackett's first deployment to Iraq, Mrs. Hackett describes him as having a goofy sense of humor, a person who rarely got angry, and one who actively participated in their sons' sporting activities. In 2005, Major Hackett deployed to Iraq leading a team of thirty Marines, whose duties included searching and destroying roadside bombs. During that tour Major Hackett lost eight Marines due to combat with the enemy. Sometime shortly afterwards, he started suffering from sleeplessness, anxiety attacks, heart problems, and high blood pressure. Additional signs included getting red in the face, becoming disoriented, and feeling overwhelmed.

After returning home he requested to retire but that request was denied by the Marine Corps. In January 2007, Major Hackett deployed a second time to Iraq where he suffered a concussion from an insurgent's bomb and unfortunately lost another two Marines from his unit. His symptoms persisted with sleeplessness, depression, and feelings of anger. Upon returning home, his drinking got out of control and Marines that were close to him, reported him as having lost all military bearing. Major Hackett finally retired from the Marines in February 2008 with a 40% disability rating. His VA post retirement medical exam only documented ankle, shoulder and knee strains, hearing loss, and hiatal hernia. Major Hackett's drinking continued to get worse. Additionally, he had trouble keeping a job and soon fell upon hard economic times. On June 5th, Major Hackett called his wife from the parking lot of the American Legion Hall, told her he loved her, turned off his phone, and later shot himself dead.

Major Hackett never recovered from losing his Marines in combat and was later heard as saying that he used to take pride in who he once was and what he had accomplished, but now he had done nothing but failed everyone.[1] Major Hackett is not alone. There are thousands of service members experiencing similar ordeals. Some are able to find assistance and yet many cannot. Service members are reluctant in seeking help due to the feeling of appearing weak amongst their peers, fear of career repercussion, or feelings of shame.

Since the early beginnings of human warfare, mankind has been affected by the horrible sights, sounds, smells, and memories of combat. For thousands of years, societies have depended upon their militias, military forces and armies to protect them and their nation/state from those who intend to threaten or destroy their way of life. Often times once the battle is over, a celebration is in order upon their return to recognize and honor the sacrifices made by the men and women involved in the conflict. But is the hosting of parades and ceremonies, in honor of the fallen and those who returned, all that is needed upon the conclusion of a horrific battle?

Does that truly relieve society of all debt owed to the warriors who went to battle in their defense? Regardless of age, gender, physical or mental strength a person possess, war changes everyone in some regard. No one is the same upon their return home. Visible war wounds are easy to identify and, in most cases, relatively easy to prescribe a treatment for it. But what about the invisible wounds service members receive? Post Traumatic Stress Disorder (which will be referred to as PTSD throughout the remainder of this paper) is such a wound. Is there such a treatment that will cure PTSD like those of a physical nature? This paper will look at PTSD and the many details involved in its complexity.

The focus of this paper will concentrate on four themes: (1) the history of this psychiatric diagnosis, (2) the symptoms and diagnosis, (3) the compounding problems associated with PTSD, and (4) senior military leadership involvement in ensuring that those who can still serve are given that opportunity. It must be noted that in today's military, junior leadership is just as important as senior leadership in the areas of resilience training, identification of possible symptoms, support and assistance in recovery, and assistance in returning to the fight. However, junior leadership's involvement will not be specifically addressed in this paper due to space limitations.

For the United States, today's military of an all volunteer force is this country's greatest asset. The citizens of this great nation continue to illustrate the validity of the above statement almost daily with their loyal support of the military. Case in point, in recent times this would include this country's demand for troops to return home from Vietnam and Beirut, Lebanon (1983) due to the wide perception of American troops dying needlessly in a foreign land. A more recent example would include their demand to the U.S. government to spend the money needed in order to purchase mine resistant ambush protected vehicles (MRAPs) for the protection of troops deployed to Iraq and Afghanistan. Because this nation relies on its military forces to conduct

operations consisting of many various missions, it only makes sense that their protection should be extended to include their mental capacity as well as their physical protection.

The American military forces are comprised of individuals from all parts of this country and from different segments of society. The risks and sacrifices of military service members are great. Often times their war stories reflect a web of complexity containing boredom, joy, pride, grief, sadness and the gory details of sights, and the sounds and smells of combat. And if wounded, not only do they have to cope with the above thoughts but they are also reminded everyday of their sacrifice to their country. To try and measure the potential impact of each experience would be fruitless. But with proper measures, such as policies and procedures, trained professionals – both in the medical field and chain of command can design and implement effective and collaborative programs to assist and treat service members which would allow the current gap between identification and redundancy in treatment to close. Individuals make a choice to join one of the four U.S. military services for many different reasons: pride in their country, paying for education, a source of employment, to escape from a bad situation, etc.. Regardless of their reason for joining, it is this nation's responsibility to continue treating them as a valuable asset once the battle is over.

The great challenge for military leaders, the staffs of medical institutions, and family members is trying to help the service member manage his/her suffering while simultaneously assist them with facing the norms of life, i.e., work, friends, family/school, and being in public. Understanding PTSD must be approached with a holistic approach in order to properly identify, treat, and manage it. This understanding is not only the responsibility of professional medical staffs, but also that of family members, senior military leaders, and even the political leaders who protect service members through policy and regulations. Today's military leaders cannot afford to shift this responsibility to the doorstep of the Department of Veterans Affairs (VA) or the

civilian sector due to a false belief that the problem is not their own. A service-member diagnosed with PTSD does not translate into being at the end of the road for future military service. It is quite the opposite. Medical authorities encouraging service members, directly or indirectly to exit the military, in order to find treatment in the VA or the private sector should be carried out with extreme caution. With future draw-downs of U.S. military forces and the prevalent number of those service members diagnosed with PTSD, the effectiveness of this nation's military forces will be heavily impacted if this is not made a top priority. This is an impasse that if left unattended will affect this entire nation – to include its communities, places of employment, medical health care system, and the very foundation of the family structure.

## Methodology

The design and intent of this research paper is to conduct a historical review, analyze prior research, review promising treatment practices for combat veterans from the Vietnam era compared to today's active duty service members from the Iraq/Afghanistan conflicts, and critique the involvement of this nation's senior military leaders and their role in ensuring that each branch of the military are assisting those service members who can and desire to remain on active duty. By organizing, integrating and assessing published material/research distributed by various governmental agencies and private subject matter experts, this study will be able to provide a critical evaluation of DoD's current medical treatment programs, the medical professionals, and our mental health institutions in attending to those active duty service members diagnosed with PTSD. In order to attain the end-state, this paper has been divided into five main themes:

**History** – PTSD has had many different names throughout the history of warfare; however the result always looks the same. PTSD affects both military men and women without prejudice. It is important for all to understand the long road this affliction has traveled in order to appreciate where this nation is today in treating PTSD. PTSD still carries a tremendous stigma not only within the culture of the U.S. military service, but also within the perception of this society.

**Symptoms/Diagnosis** – Willful ignorance of the symptoms of PTSD is no longer a legitimate excuse military leaders can use when assessing the effectiveness of active duty service members. It is commonly known today that traumatic stressors/events can highly influence PTSD; however, it is also known that not everyone experiences a traumatic event in the same way hence, not everyone will become a casualty to PTSD. It is important in this section to understand how a person is diagnosed with PTSD and the symptoms that he or she may demonstrate.

**Compounding Issues associated with PTSD** – The importance of this section is to gather a universal understanding of the many obstacles in the path of someone diagnosed with PTSD. These obstacles cover areas such as identifying something is wrong, the stigma of seeking medical assistance, managing PTSD after being properly diagnosed, "fitting in" in public, on the job and family settings, and moving on with one's life. Ultimately, this means being an effective and functioning member of society. A stark comparison between those veterans serving in the Vietnam conflict with those service members deployed to Iraq and Afghanistan will also show the progress that has evolved in taking care of service members. Prior to, during, and after a

conflict, it is not just the service member's responsibility for his or her transition but that of the entire community, i.e., the armed forces.

**Current and Past treatment of Service Members with PTSD and DoD/Service policy designed to assist the service member** – This section shows the progress this nation has achieved when it comes to treating service members with PTSD. New breakthroughs and discoveries are being made with each passing year. With the increased number of service members and veterans being diagnosed with PTSD, it would behoove both the country and its leaders to institute not only new and improved treatment programs but to also create stronger resilient training programs to reduce the amount of stressors service men and women are encountering.

**Senior military leadership involvement -** This nation's senior military leadership must ensure their involvement in this area for the numbers of those diagnosed with PTSD is staggering. However, with proper identification, treatment and management, these service members can remain effective Soldiers, Marines, Sailors, and Airmen in order to continue serving and protecting this country.

## Literature Review

### History

For the past decade this nation has been at war. And yet, thousands of young men and women continue to volunteer their services everyday in order to protect this great nation. Thousands of service members have deployed to Iraq and Afghanistan and many have returned home not the same as before they left. The history of PTSD has had a turbulent journey and has

had affects that are still present today. From the very beginnings of human warfare, men and women have protected their vital interests and homes through combat. Though it has been referred to by many different names, PTSD has afflicted mankind for as long as wars have been fought. Even the Greek historian Herodotus recorded the practice of the Spartan commander Leonidas who, at the battle of Thermopylae Pass in 480 B.C., dismissed some of his men from combat due to his recognizing they were mentally exhausted from prior battles.[2] In fact, it was not until 1678 when a Swiss physician named Johannes Hofer coined the term *nostalgia* in a first attempt to name this condition of PTSD. Initially it was called *Swiss disease* due to its prevalence amongst Swiss mercenaries. Nostalgia was characterized by melancholy, incessant thinking of home, insomnia, weakness, loss of appetite, anxiety, cardiac palpitations, stupor, and fever.[3]

During the Napoleonic era, French physicians developed an advanced and modern understanding of the factors that lead to nostalgia, citing conditions ranging from the social to the environment. Dominique Jean Larrey, Napoleon's chief surgeon, prescribed a course of treatment that, while biologically based, took under heavy considerations the social factors involved with PTSD.[4] Looking at this from today, it appears that this was a precursor to contemporary understanding of the effects of PTSD. The American Civil War also saw a significant amount of soldiers who suffered from the psychological trauma resulting from battle. During that struggle, the Union Army recognized over 2,600 cases of insanity and 5,200 cases of nostalgia. As a common practice, those official cases of insane soldiers were just discharged and left to find their own way home. Public outcry of this practice resulted in the 1864 War Department order requiring such soldiers to be transferred to the government hospital until their family members could retrieve them.[5]

N*ostalgia* was replaced with the term *shell shock* during World War I. This term was used to describe the presumed neurocortical effects of heavy artillery.[6] However, in reality the typical term shell shock was often considered as a weakness in soldiers.[7] During World War II, *combat exhaustion* was the phrase used. It was also during this time that military psychiatrists were instrumental in driving the medical profession into the modern era of psychiatric diagnosis.[8] By the time of the Korean Conflict, the name *gross stress reactions* appeared in the first edition of the *Diagnostic and Statistical Manual* (DSM I) of the American Psychiatric Association published in 1952.[9] By 1980 the term combat exhaustion was eliminated with the publication of DSM II and posttraumatic stress disorder became the official term.

## Symptoms/Diagnosis

Being able to identify and start treating PTSD symptoms early is vitally important for today's service members. Early intervention can often times assist the service member with managing this disorder before conditions worsen and lead to greater consequences. Unfortunately, the stigma associated with being diagnosed with PTSD has made it difficult for service members to admit that they have psychological pain and difficulty in seeking mental health treatment. Even with advances in the perception and treatment options, service members still fear that they will be labeled as weak or mentally incompetent. Worse yet, people will think less of them.[10]

PTSD, however, is a medically recognized anxiety disorder that can develop in anyone after they've been exposed to a traumatic and stressful event.[11] Thus, the critical feature of PTSD is the development of distinguishing symptoms in the senses of the individual following exposure to a traumatic stressor. The stressor usually involves being a part of or witnessing an event of horrific magnitude. Some of the more common symptoms of PTSD include nightmares of past

traumatic events, flashbacks, triggers of physical and psychological stresses, avoidance of any reminders of similar stimuli, isolation from others, emotional numbing, outbursts of anger or irrational rage, problems in concentration and focus, hypervigilance for triggers or paranoid thinking.[12]

PTSD can only develop in someone after a direct and personal experience/witnessing of a traumatic event. The essential characteristics of PTSD are: (1) Re-experiencing, (2) Avoidance or numbing, and (3) hyperarousal.[13] Re-experiencing breaks down to intrusive recollections of a traumatic event, often in the form of flashbacks or nightmares.[14] A person may feel the exact same fear and horror they did when the event took place. Often times there is a trigger – a sound, sight, or smell that causes one to relive the event.[15] Avoidance or numbing are efforts of the service member to avoid anything associated with the trauma and the numbing of one's emotions. They may even shut themselves off in order to protect themselves from feeling pain and fear.[16] Hyperarousal often is manifested by difficulty in sleeping and concentration.[17] Those suffering may operate on high alert at all times and often have very short fuses. They may also always be alert and on the lookout for danger. Additionally, they may be easily startled by unexpected noises and become angry without warning.[18]

PTSD can also be linked to biological changes within a person as well, such as increased sensitivity in the brain's system for dealing with threat and fear. It causes significant distress and can be severe enough to cause problems with daily functioning.[19] There are four main reactions of daily functioning that need to be mentioned: reactions that affect daily activities or the physical body, reactions that affect a person's behavior, emotional reactions, and reactions that affect an individual's relationship.[20] Reactions that affect daily activities or one's physical body include trouble sleeping or overly tired, stomach upset and trouble eating, headaches and sweating when thinking about a significant event, bad dreams, lack of exercise, rapid heartbeat

or breathing and/or existing health problems becoming worse. Reactions that affect a person's behavior include attributes such as trouble concentrating, jumpiness and easily startled, being on guard and always alert, too much drinking, smoking or drug use, flashbacks or unwanted memories, avoiding people or places, or having difficulty doing regular tasks at work or school. Emotional reactions include being irritable or angry; experiencing shock; being numb or unable to feel happy; feeling nervous or helpless; feeling sad, guilty, or rejected; easily becoming upset or annoyed; or a sense of feeling hopeless. And finally, reactions that affect an individual's relationship include feeling withdrawn or detached, experiencing an emotional shutdown resulting in loss of intimacy, a mistrust of others, and being over-controlling or overprotective.[21]

Not everyone who experiences a traumatic event will develop PTSD. Its development actually depends on the intensity of the traumatic event and on the host's risk and protective factors occurring before, during, and after the event.[22] After a traumatic event, there is a wide variation among service-members with regard to both the timing of the onset of symptoms and the types of symptoms. In other words, service-members may have a delay between the onset of symptoms or vary in the way they approach medical professionals. For example, a service member may report to the health facility with a complaint of something physical such as sleeplessness or maybe alcohol abuse, or something unrelated directly to PTSD. Only through a highly trained physician and a complete health evaluation will PTSD be discovered. This is often a hit or miss opportunity and, as a result, PTSD within the service-member often is not discovered until symptoms worsen.

Another term for this occurrence is comorbidity. This implies that there is a presence of at least one disorder in addition to the presenting diagnosis (for example, PTSD and major depressive disorder in the same individual, or PTSD and alcohol abuse in the same person). Some studies indicate that more than 80% of the people who have PTSD also have major

depressive or another type of psychiatric problem.[23] Fortunately, with the increase of those being diagnosed with PTSD and the advancement in training and awareness, the once huge gap between a proper diagnosis and an incorrect one is now closing substantially. Today's professional medical personnel are much more skilled above where they were just six years ago during the height of the war.

## Compounding Problems Associated with PTSD

After the parades and ceremonies are over for those returning home from war, some service men and women will return home and resume a normal life with a greater appreciation for the experience they had to endure. Other service members may undergo a temporary period of stress recovery before they adjust fully. Unfortunately, service members from the Iraq and Afghanistan wars are being diagnosed with PTSD in record numbers as they show signs of struggling with many of the same demons experienced by veterans of earlier wars such as substance abuse, failed relationships, difficulty in maintaining work, and even suicide.[24] The numbers of those service-members being diagnosed are still growing today as awareness and education is becoming more available and screening procedures are being refined.

Service members who have fought in combat face a number of challenges that those who did not have yet to endure. Being exposed to traumatic events such as the witnessing of death (that of the enemy and friendly), the handling of human remains, and the loss of close friends and/or military leaders all may lead to PTSD symptoms. Who are the 21st century service member who have fought over this last decade? In 2008, the average age of an American active duty enlisted person was 27 and for officers, 35. Reserve component members are slightly older with enlisted averaging 31 and officers being 41. A little over 50% of U.S. service members are married and

about 43% have children. 40% are single with no children. Of those deployed to Iraq and Afghanistan, almost 50% have been Reserve component members and 50% belonged to the active duty ranks. Women are also playing a larger role in our U.S. military today than ever before, composing 14% of the troops.[25] Although these numbers do not reflect the current make-up of those diagnosed with PTSD, these statistics do show that the current military force is a close resemblance to that of the nation's society. PTSD does not discriminate and can affect anyone regardless of background and current status.

In what ways do PTSD symptoms cause addictive behavior? One example can be taken from the Vietnam War, a high degree of drug and alcohol abuse has been documented affecting its veterans. Evidence of that fact comes from the results of a national survey revealing that 31% of Vietnam-era veterans are alcoholic and a study of hospitalized veteran psychiatric patients revealed that 60% abused drugs or alcohol.[26] Lacoursiere, Godfrey, and Ruby (1980) have reported that Vietnam veterans with typical PTSD symptoms, including intrusive traumatic imagery, attempted to self-medicate with alcohol or drugs. The author also found a similar pattern in that 66% of Vietnam veterans seeking treatment for drug and alcohol addiction complained of recurrent dreams and imagery one or more times a week; for this they used downers such as alcohol, sedatives, or minor tranquilizers. Furthermore 66% of addicted Vietnam veterans were found to suffer from emotional detachment, risk-taking behavior, and aggressive outburst, for which they used substances to control aggression or to break through emotional detachment.[27]

Such statistics are not much different for service members returning from Iraq and Afghanistan. Alcohol and drugs are used to cope with daily life and give a false security blanket that the service member is beating the problem with which he or she is currently facing. In reality, substance abuse only offers a way to avoid dealing with uncomfortable situations,

memories, or feelings.[28] Left unattended, this can turn into depression causing the service member to feel even more negative about themselves. In addition to drug and alcohol abuse, there are other problems compounded by PTSD. First, one may experience nightmares, flashbacks, and disturbing images. Frequent images may cause the service member to wonder whether anyone can truly understand what they experienced and can cause one to distance themselves even from friends and family. Avoidance is a common problem for many service members as well. Withdrawing can be used to protect themselves from the fear of losing their family, but as a result it can make them feel even more excluded from family matters – thus increasing their insecurities. Arousal symptoms can lead one to be on guard or quickly angered. This causes the service member to impose new restrictions and rules on the family to make sure he or she always knows where they are and sometimes things once enjoyed are now forbidden such as eating out.[29]

## Current and Past treatment of Service Members with PTSD

Unfortunately, there are a discouraging number of veterans and active duty service members in this nation with PTSD, with more than 800,000 diagnosed and countless others who have not sought help as Soldiers and Marines continue to return home from war. These numbers will cause a seismic shift not only within the armed forces but also in society by the sheer economic cost of health care and loss of human capital.[30] According to a 21 November 2011 *Marine Corps Times Article*, 20% of the 2.1 million service members who have deployed to Iraq and Afghanistan have reported symptoms of PTSD. According to pentagon data, other comorbidities commonly diagnosed in combat troops are major depression, alcohol and drug dependence, and bipolar disorder.[31] As time moves forward, the costs for the American tax payer will escalate

substantially in an attempt to care for everyone affected. Fortunately, a major difference between the past and present is that currently there is stronger community support systems for military service members compared to the war in Vietnam. In general, the American public, DoD, and military leaders have learned from their mistakes following Vietnam and past wars; it is now recognized that service members deserve the support they so honestly earned.[32]

As stated before, not everyone will be affected with PTSD. About one out of four individuals exposed to a traumatic event can be expected to develop PTSD.[33] More resilient individuals will have a flexible self concept that will allow them to deal better with trauma.[34] They will be able to assimilate new experiences easier than someone with a rigid worldview. Other variables or factors that have been identified in determining how traumatic experiences will be interpreted are social attitudes such as familial support, socio-emotional factors or a person's developmental stage and place in a community, and active membership in organized religion or one's internal spiritual belief system.[35]

The first organized military system for psychological treatment of combat fatigue occurred during the Russo-Japanese War (1904-1906), when Russian physicians were placed close to the front lines in order to perform evaluations of traumatized soldiers. This system of forward treatment recognized the value of caring for psychological casualties as quickly and as close to the action as possible in order to get them back into the fight.[36]

Today that system is still being practiced. On 7 October 2011, the Marine Corps issued Maradmin 597/11, a policy applicable to the entire Marine Corps. This Maradmin mandated the establishment of Operational Stress Control and Readiness (OSCAR) Teams. OSCAR is a Marine led training team of Marines, medical, and religious ministry personnel within each battalion sized unit. Their primary mission is to assist commanders in maintaining their war fighting capabilities by identifying, managing, and preventing combat and operational stress

issues as early as possible. All battalion level or equivalent commands across the entire Marine Corps are mandated to establish, train, and maintain these OSCAR teams by 31 January 2012.[37]

According to a recent article in the *Camp Pendleton Patch*, OSCAR is considered the mental health arm of the Marine Corps.[38] It offers a host of services designed to ensure Marines know where to get help and to provide "a big brother" type relationship among all Marines and Sailors within that unit. Under the OSCAR program, psychiatrists, nurse practitioners, and psychiatric technicians deploy with and also live within the units on the front lines. This type of practice relates to the same concept the Marines and Navy established with the battalion and regimental aid stations. With professionals being within arm's reach of that unit's service members, not only does it make identification and urgent intervention more accessible and timely, a rapport between the service members and the professional health staffs are formed. This ensures a familiarity similar to a fire-team leader/squad leader with their Marines. Although this is not the panacea to cure PTSD, it is a giant leap forward in getting the right people, to the right service member, at the right time.

The OSCAR team that consists of the psychiatrists, nurse practitioners, psychiatric technicians, Chaplains, and Marine leaders all work together in a coordinated effort to address Marine PTSD issues.[39] OSCAR teams are co-located with deployed units. This ensures Marines are taught about PTSD and screened for signs of being at risk before, during, and after a deployment. They are taught to recognize and self-monitor by using a color coded system. The color green represents one's state of mind when at a relaxed state. The continuum proceeds through yellow, orange and red which indicate the amount of intensity to the problem. Marines are often at risk from on-going anxiety, mental illness, depression, or missed diagnosed PTSD from previous deployments.[40] If a Marine happens to be identified by the OSCAR team as "at risk", he or she will not be able to deploy. Once a Marine returns, they are screened. They are

again screened at the three and six month mark by undergoing a more detailed post deployment help reassessment (PDHRA). Through the assistance of the Post Deployment Center, individual and group psychotherapy are the first attempt in dealing with a Marine's anxiety.[41] Psychotherapy is the primary means. Marines come in and talk to somebody and sometimes are assigned homework to complete. This type of counseling usually resolves 60 to 70% of cases over a period of three to six months.[42]

Over the past decade of fighting in two different theaters, the U.S. has learned much about PTSD. This has resulted in effective treatment programs and resources to help service members and their families return to normal and healthy lives. The biggest challenge now is to ensure that the stigma associated with PTSD remains broken and that the knowledge is getting out amongst the service members so those who need help can reach out for assistance. With the implementation of OSCAR teams within every Marine battalion, this suddenly appears to be possible. Nearly all service members will return from war and experience some sort of readjustment issues after a long deployment.

However, with today's education and new efforts in training, teaching service members various coping skills earlier vice later will assist them in managing this successfully. In Patricia Kime's article in the *Marine Corps Times* of 21 November, "Program Will Train Civilian Psychologists to Help Vets", she reports on a new online program that aims to help civilian mental and behavioral health care providers better serve service members, veterans, and their families. The program is designed by the Defense Department and the National Council for Community Behavioral Healthcare. It is based on a course offered by the Center for Deployment Psychology at the Uniformed Services University of the Health Sciences. Included in this new 14 part curriculum program are classes on the basics of traumatic brain injury, the impact of combat stress on families, post-traumatic stress disorder treatment, and military culture. The cost

of the program is currently $350 and meets continuing education requirements for behavioral health providers according to the council.[43]

As mentioned earlier under the OSCAR program, the use of psychotherapy is achieving great results. Specifically, treatments such as behavior modification, desensitization techniques, and cognitive-behavior therapy have positive value in helping service members and veterans heal from post war events. Cognitive-behavior therapy as well as psychodynamic psychotherapy can assist service members to face repressed memories and enable them to cope with life.[44] Through recent epidemiological studies (branch of medicine that studies epidemics), a service member seeking treatment for PTSD is more than likely to also meet criteria for drug abuse or dependence.[45]

As addressed in the *PTSD Research Quarterly*, Volume 2 article, recent arguments/controversy regarding best practices for psychotherapy, especially the application of exposure-based techniques, remains a significant barrier to treatment delivery.[46] Various causes leading down the path for PTSD and substance use disorder (SUD) such as self-medication, common vulnerability/susceptibility, or the notion that the presence of one disorder confers high risk for the other have been proposed.[47] This recent discovery is of high importance especially in order to develop and disseminate best practices for treatment of PTSD/SUD due to an estimated co-occurrence rate of 25 and 50% of Iraq and Afghanistan service members and veterans.[48] Although there are well documented and effective behavioral or cognitive behavioral treatments for both PTSD and SUD, there is little literature for co-occurring PTSD/SUD. There are many who argue and practice (such as the VA and DoD) that PTSD treatment should only be initiated after a period of abstinence has been achieved. There are currently three definitive treatment plans for treating PTSD/SUD: 1) sequential treatments, 2) concurrent treatments, and 3) integrated treatments.[49]

Under sequential treatments, a program called Transcend provides a 12 week partial hospitalization which is divided into six weeks of skills development followed by six weeks of trauma processing. All patients must complete a primary substance abuse rehabilitation program within six months of beginning Transcend.[50] Concurrent Treatment involves cognitive behavior therapy (CBT) for persons with PTSD/SU and is intended for use in addiction treatment settings. It includes core components of state of the art treatment for PTSD. The CBT for PTSD manual comprises eight modules, which are covered in eight to twelve sessions and through a client workbook which is used in conjunction with the therapist manual.[51] Integrated treatments is a cognitive behavioral group psychotherapy that does not include a trauma focused component. It has three RCTs to its credit. The program Seeking Safety has been shown to successfully decrease substance use and trauma related symptoms among women with PTSD and SUD.[52] As stated above, literature on psychotherapy treatment of PTSD/SUD is very limited, nonetheless further research into exposure based therapies in concert with PTSD/SUD is very much worth the time and money.

Although one may not catalog directly under a treatment based program, DoD sponsored initiatives through the use of social media/internet deserves mentioning in this section. Due to the stigma still associated with thoughts of mental health issues, social media/internet resources provide service members the ability to reach out anonymously and conduct private research and conversations before making their decision to reach out to professional medical authorities for assistance. Too many to list here, some stand-out initiatives are the Comprehensive Soldier Fitness Program, Comprehensive Resilience Modules, Online Real Warriors, Soldiers Fitness Tracker, Leaders Guide For Managing Marines in Stress, and MCCS One Source. These DoD initiatives set out to focus on the entire force giving service members and veterans the ability to identify common symptoms, techniques to enhance resilience, facilitate and support

reintegration, in different areas of emotional, social, spiritual, family and physical - thus empowering them to continue thriving in productive careers.

## Involvement of Senior Military Leaders

On the walls of the lobby in the central office of the Department of Veterans Affairs (VA), there is a quotation by President Abraham Lincoln – "…to care for him who shall have borne the battle and for his widow and his orphan.". In that quotation, the President was talking about the nation taking responsibility to care for its combat veterans and his/her family. In the event of every major conflict, when this nation needed its citizens the most they have answered the call each and every time with their time, sacrifices, and, for many, lives. Even today, since September 11, 2001, the call of duty was answered by this nation's citizens. Some may argue that this war has been quite different than previous wars/conflicts not only due to the sheer number of service members being diagnosed with PTSD, but because during Iraq and Afghanistan there is a higher proportion of the armed forces being deployed. Deployments are longer and rotation cycles of troops for redeployment to combat have been shortened. Other factors contributing to service member's level of stress include infrequent, to virtually no breaks during combat, a constant fear for one's life due to roadside bombs, mortar and rocket attacks, suicide bombers, the threat of snipers within city limits, and the handling of human remains. Additionally, and probably more significant due to today's technology and innovation, service members are living through injuries that in the past would have resulted in death.[53]

With unprecedented numbers of service members being diagnosed with PTSD, there is no better time than today for senior military leaders to live up to the above task assigned by

President Lincoln. This is not to say that service members from the Iraq and Afghanistan wars deserve more attention or treatment than veterans of past wars. Rather, due to improved education, research, and understanding of PTSD, coordinated and collaborated efforts throughout DoD, VA, and civilian/private sectors should combine their skill sets, efforts, and resources to remove all barriers to treatment for the benefit of today's service member and veterans.

According to a RAND report published in 2008, *Invisible Wounds of War*, since October 2001, approximately 1.64 million U.S. troops have been deployed to Iraq and Afghanistan.[54] Without taking a determined stance to get ahead of this predictable consequence, the impact will overwhelm this nation in the near future. Today's senior military leaders should focus their attention and efforts in three distinct areas to ensure today's service members diagnosed with PTSD are reintegrated into the ranks to maintain an effective military force: 1) oversight and advocacy, 2) policy, and 3) professional education and resilience training.

All three of the above areas are just as important as the next. Unfortunately, in the area of oversight, senior leaders have the most room for error. They must not allow their attention to be distracted. There is an old saying that states, "what's important to the boss is important to me". This could not be any truer in this case. Today's military forces are being used in areas never before seen in history. With the recent publication of the defense strategy, the future drawdown of military forces, a reduced DoD budget, and a new focus in the Asian Pacific, a condition now exists for leaders not to focus on service members with PTSD and the future affects it will have on this force.

To avoid this mistake senior leaders must ensure their frequent involvement. This should not be interpreted as to simply hold a quarterly or annual briefing, nor does it equate to appointing someone else in charge and thus relieving senior leaders of situational awareness or

responsibility. With the fast pace of on-going technology and research developments in today's science world, decision makers need to be aware at the right time to ensure timely decisions. To allow senior leaders to lose focus will translate into missed opportunity to take care of service members and veterans. Only senior leaders can make the decisions required to move policy, progress forward, and ensure standard care is available to all. Oversight also means the removal of known barriers and to be prepared to predict and remove future ones. This can be done in a couple different areas.

First, senior leaders need to ensure that the culture of the armed forces reflect a positive outlook towards PTSD and any other mental health issues. As stated before, the frequency that forces are being deployed and the constant pressure/stress inflicted on today's service member are unlike anything seen in the past. If this is true, our leaders need to ensure that the way one thinks about what it means to be a warrior also reflects the thinking of taking proper care of that same warrior, both physically and mentally. Ensuring and maintaining the psychological health of service members is also essential to the overall health, performance and resilience of the armed services. All too often the concept of being a true warrior gets in-grained into the heads of junior service members due to the re-telling of war stories and fantasy narratives created by Hollywood. A proper military environment should reflect an attitude from its senior and junior leadership that it is alright to ask for assistance. They must make the strong effort to ensure that the attitude towards mental health services is accepted. This will only improve the likelihood that service members will seek the help they need.

Second, the removal of "barriers to care" needs to be addressed by senior leaders. Problems in this area include the adding of appropriately trained mental health professionals in military hospitals, bases and stations, relaxing the referral process procedures to make access to care more available; and ensuring that leaders are talking to their Marines, Sailors, Soldiers, and

Airmen about reporting problems and receiving proper care. When leaders sponsor open forums/town hall meetings, and conduct monthly meetings with junior leaders, they must ensure they are reinforcing "the promise" of taking care of service members to the public. Not only will this message be well received by the services, but it will also resonate amongst service members debating whether or not they should step forward.

Senior military leaders also need to continue their emphasis to the services, Congress, and DoD, on the necessity to continue research, refine the problem, and create policy that will ensure rapid access to treatment, allow an expansion of health care services, and ensure proper funding is provided. Trying to predict future consequences of those service members diagnosed with PTSD is difficult at this time due to a number of variables. But with the future drawdown looming in the horizon, leaders need to ensure that the force continues to be effective and more educated in the area of mental health issues. Future deployment cycles are not likely to decrease. The amount of stress placed on service members will not likely decrease. However, creating policy and procedures to ensure continuing research and development, improved integrated programs, and a more educated and resilient force will aid in a quicker road to recovery.

One immediate change senior military leaders can direct actions upon is the re-publishing of DoD Directive 6490.1. This order was originally revised October 1, 1997 and more recently certified as current as of November 24, 2003. With the improvements and more recent knowledge now acquired in the area of PTSD, this order needs to be revised in its entirety by addressing the handling of service members diagnosed with PTSD, along with regular mental health evaluations. Currently, it addresses the referral process, the policy on service members who may require mental health evaluations, and the responsibilities of the commanding officer in these types of cases. PTSD should also be added this order. Specifically, in the very beginning of the order, a chapter confirming the importance of mental health evaluations to both the service

member and the military services in the areas of overall health and performance will further assist in dissolving the stigma associated with mental health. Further, a section should be devoted to mandating pre-service, pre-deployment, mid-deployment, post deployment, and post service evaluations for all service members. This should also include a policy of sharing mid-deployment and post-deployment information with the commanding officer. And, finally, a section should be devoted to establishing a policy on the separation of service members diagnosed with PTSD. This same policy should include guidance for commanders to consider when separating a service member who is pending legal consequences as a result from PTSD conditions.

Education and resilience training will maintain the force. Education does not just include the service members, but that of mental health professionals as well. DoD need to ensure that the services maintain psychologists/psychiatrists and nurse practitioners who are properly trained and certified in order to provide quality care services. This should include training in the most current and contemporary research at the time. Supervision over the collaboration and cooperation between the different services, the VA and the Centers of Excellence is a must in order to be truly successful in combating this problem. Advanced progress in education amongst professional military, medical, and private sector personnel will facilitate a structured, long term, holistic fitness program that will build upon the development and enhance the performance of today's military service member and further improve and strengthen American military forces.

## Conclusion

Looking towards the future concerning the nation's national strategic policy and the conflicts it chooses to engage, its military forces face a future full of so-called small scale conflict. This means a protracted type of conflict with both state and non-state actors who are more than willing to use extreme violence to achieve their political and ideological goals. This nation's armed forces will be the security blanket that will protect and secure its national interests and securities our political leaders deem vitally important. So why should this topic of PTSD treatment and resilience training important to senior military leaders? The above prediction of future confrontation with such foes will continue to involve prolong exposure to combat stress over numerous deployment rotations by today's service members. PTSD will remain to be an invisible wound to the naked eye and will also be misunderstood and misdiagnosed by friends and family, the chain of command, and professional medical personnel, unless senior military leaders make it a priority. Senior leadership must oversee and advocate the importance of treatment and further research of PTSD, ensure quality control measures and standardization of care, and coordinate and integrate the collaboration and coordination between DoD, VA and the private sector.

Without implementing the above actions by this nations senior military leaders, four very severe and destructive consequences will most likely occur to our military services: (1) more tragic events such as the recent (March 2012) tragedy of the killing of 17 Afghans will occur needlessly – causing a profound effect on this nation's strategic policy and end-state, (2) a heavy impact on this nation's health care costs will ensue and spill over into the private sector, (3) both the relationships amongst service members and the relationships amongst service members and their family structure will deteriorate over time, and, finally, (4) the American perception of this

nation's all volunteer force will adversely feel the affect due to the perceived assumption that the services do not take care of their own – thus affecting the quality of recruitment.

Since the American Revolution the size and configuration of this nation's military has both risen and decreased during periods of war and peace. Today, like many times before, this nation's armed forces prepare for a force drawdown after more than a decade of fighting. With this expected future lull in military operations, the time to start the focus and the conversations on this problem is now. A lack of centralized oversight and collaborative and coordinated efforts between not only DoD and the VA, but that of the private sector will only extend the gaps in treatment of today's service members and veterans. With a security environment where the enemy has no boundaries and with the increase in combat rotations, sustaining the quality of the military forces in the form of personnel and resilience to combat stressors is a task only senior military leaders can guarantee. Since September 11, 2001, service members have dealt with combat stressors that are very much like any other conflict in this nation's history. However unlike past conflicts, both the military and medical professions have made tremendous progress in the field of treating and researching PTSD. Now is not the time to lose focus.

# APPENDIX A

ACRONYMS

| | |
|---|---|
| **CBT** - | Cognitive Behavior Therapy |
| **DoD** - | Department of Defense |
| **DSM** - | Diagnostic and Statistical Manual |
| **MRAPs** - | Mine Resistant Ambush Protected Vehicles |
| **OSCAR –** | Operational Stress Control and Readiness Teams |
| **PDHRA -** | Post Deployment Help Reassessment |
| **PTSD** - | Post Traumatic Stress Disorder |
| **RAND** - | Research and Development |
| **RCTs** - | Randomized Clinical Trial |
| **SUD** - | Substance Use Disorder |
| **VA** - | Department of Veterans Affairs |

# APPENDIX B

Definition of Terms

**Comorbidity -** a presence of at least one disorder in addition to the presenting diagnosis. For example; PTSD and alcohol abuse in the same individual.[23]

**Junior Military Leadership** – The military leadership that is in the immediate chain of command of a service member.

**Neurocortical** – A word not found in the English dictionary, however in the context used, it involves the results from the actions or conditions of the cerebral cortex, along with anatomy, physiology, and pathology of the nervous system from prolonged exposure to artillery.[7]

**Post Traumatic Stress Disorder** – A psychiatric diagnosis identified when the development of a series of characteristic symptoms in the senses of an individual following exposure to an extremely traumatic event/stressor.

**Psychiatric Diagnosis** – The identification of a disease or disorder in the areas of medicine that deals with mental, emotional, or behavioral of an individual.

**Senior Military Leadership** – Military and civilian leadership holding the rank/position of General Officer/SES.

## Endnotes

[1] Greg Jaffe. Marine's Suicide Is Only Start of Family's Struggle. *The Washington Post.* (February 2012). http://www.washingtonpost.com/world/national-security/marines-suicide-is-only-start-of-familys-struggle/2012/01/31/gIQADLF46Q_story_1.html

[2] Ilona Meagher. *Moving A Nation To Care: Post Traumatic Stress Disorder and America's Returning Troops.* (Brooklyn, NY: IG Publishing, 2007), 13.

[3] Meagher, 13.

[4] Meagher, 14.

[5] Meagher, 14.

[6] Wilfred Quaytman, , Ph.D. (Ed). *The Vietnam Veteran: Studies In Post-Traumatic Shock Disorder: Diagnosis, Treatment, and Legal Issues* (3rd Ed). (New Orleans, LA: Bruno Press; 1996), 15.

[7] Frank Lawlis, Dr.. *The PTSD Breakthrough; The Revolutionary, Science-Based Compass Reset Program*. (Naperville, Illinois; Source Books, 2010), 7.

[8] Institute of Medicine of the National Academies. *PostTraumatic Stress Disorder: Diagnosis and Assessment. Subcommittee on Posttraumatic Stress Disorder of the Committee on Gulf War and Health: Physiologic, Psychologic and Psychosocial Effects of Deployment-Related Stress*: (Washington, D.C.: The National Academies Press; 2006), 7.

[9] Quaytman, 15.

[10] Laurie B. Slone, PhD. & Matthew, J. Friedman, MD., PhD. *After the War Zone: A Practical Guide For Returning Troops and Their Families.* (Philadelphia, PA: Da Capo Press; 2008), 137-138.

[11] Slone, & Friedman, 150.

[12] Lawlis, Dr, 7.

[13] Institute of Medicine of the National Academies, 2.

[14] Institute of Medicine of the National Academies, 2.

[15] Slone, & Friedman, 152.

[16] Slone, & Friedman, 152.

[17] Institute of Medicine of the National Academies, 2.

[18] Slone, & Friedman, 152.

[19] Slone, & Friedman, 151.

[20] Slone, & Friedman, 67.

[21] Slone, & Friedman, 67.

[22] Institute of Medicine of the National Academies, 3.

[23] Institute of Medicine of the National Academies, 20.

[24] Erin P. Finley. *Fields of Combat: Understanding PTSD Among Veterans of Iraq and Afghanistan.* (Ithaca and London, ILR Press, An Imprint of Cornell University Press, 2011), 2.

[25] Slone, & Friedman, 20.

[26] Quaytman, 120.

[27] Quaytman, 120.

[28] Keith Armstrong, L.C.S.W., Suzanne Best, PhD., Paula Domenici, PhD. *Courage After Fire: Coping Strategies for Troops Returning From Iraq and Afghanistan and Their Families.* (Berkeley, CA.: Ulysses Press, 2006), 25.

[29] Armstrong, Best, & Domenici, 31-32.

[30] Lawlis, 8.

[31] Patricia Kime. "Program Will Train Civilian Psychologists to Help Vets" Marine Corps Times 14, 21 November 2011.

[32] Slone, & Friedman, 201.

[33] Daryl S. Paulson, & Krippner, Stanley. Haunted by Combat: Understanding PTSD in War Veterans. (New York: Rowman & Littlefield Publishers, Inc., 2010), 13.

[34] Paulson, & Krippner, 12.

[35] Paulson, & Krippner, 12-13.

[36] Meagher, 13.

[37] Maradmin 597/11.

[38] Judy Erickson, Marine Corps Wages War on PTSD. *Camp Pendleton Patch*. July 14, 2011. http://camppendleton.patch.com/articles/marine-corps-wages-war-on-ptsd

[39] Erickson, July 14, 2011.

[40] Erickson, July 14, 2011.

[41] Terri Tanielian & Jaycox, Lisa H. eds. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. RAND; Center for Military Health Policy Research; California Community Foundation. www.rand.org. 2008), 3.

[42] Erickson, July 14, 2011.

[43] Patricia Kime. "Program Will Train Civilian Psychologists to Help Vets" *Marine Corps Times* 14, 21 November 2011.

[44] Paulson, & Krippner, 23.

[45] Suzy B. Gulliver PhD. & Steffen, Laurie E. BA. Towards Integrated Treatments For PTSD And Substance Use Disorders. PTSD Research Quarterly; Advancing Science and Promoting Understanding of Traumatic Stress, (National Center for PTSD, Volume 21, No. 2, ISSN 1050-1835, Spring 2010), 1.

[46] Gulliver & Steffen, 1.

[47] Gulliver & Steffen, 1.

[48] Gulliver & Steffen, 1.

[49] Gulliver & Steffen, 2.

[50] Gulliver & Steffen, 2.

[51] Gulliver & Steffen, 2.

[52] Gulliver & Steffen, 2.

[53] Tanielian & Jaycox, 5.

[54] Tanielian & Jaycox, 3.

## Bibliography


Amos, James F., LtGen. Combat Stress: *A Concept For Dealing with the Human Dimension of Urban Conflict*. Deputy Commandant, CD&I, Quantico, VA, 2007.

Armstrong, Keith, L.C.S.W., Suzanne Best, PhD., Paula Domenici, Phd. *Courage After Fire: Coping Strategies for Troops Returning From Iraq and Afghanistan and Their Families*. Berkeley, CA.: Ulysses Press, 2006.

Erickson, Judy. Marine Corps Wages War on PTSD. *Camp Pendleton Patch*. July 14, 2011. http://camppendleton.patch.com/articles/marine-corps-wages-war-on-ptsd

Finley, Erin P. *Fields of Combat: Understanding PTSD Among Veterans of Iraq and Afghanistan*. Ithaca and London, ILR Press, An Imprint of Cornell University Press, 2011.

*Institute of Medicine of the National Academies*. PostTraumatic Stress Disorder: Diagnosis and Assessment. Subcommittee on Posttraumatic Stress Disorder of the Committee on Gulf War and Health: Physiologic, Psychologic and Psychosocial Effects of Deployment-Related Stress: Washington, D.C.: The National Academies Press; 2006.

Gulliver, Suzy B. PhD. & Steffen, Laurie E. BA. *Towards Integrated Treatments For PTSD And Substance Use Disorders*. PTSD Research Quarterly; Advancing Science and Promoting Understanding of Traumatic Stress, National Center for PTSD, Volume 21, No. 2, ISSN 1050-1835, Spring 2010.

Lawlis, Frank, Dr.. *The PTSD Breakthrough; The Revolutionary, Science-Based Compass Reset Program*. Naperville, Illinois; Source Books, 2010.

Maradmin 597/11. CMC Washington DC MRA MF(UC): Operational Stress Control And Readiness Training Guidance. R071647ZOCT 11

Kime, Patricia. "Program Will Train Civilian Psychologists to Help Vets" *Marine Corps Times* 14, 21 November 2011.

Kime, Patricia. "Mental Health Programs Overlap, Think Tank Says". *Marine Corps Times,* 14 21 November 2011.

Meagher, Ilona. *Moving A Nation To Care: Post Traumatic Stress Disorder and America's Returning Troops.* Brooklyn, NY: IG Publishing; 2007.

Paulson, Daryl S. & Krippner, Stanley. *Haunted by Combat: Understanding PTSD in War Veterans*. New York: Rowman & Littlefield Publishers, Inc., 2010.

Quaytman, Wilfred, Ph.D. (Ed). *The Vietnam Veteran: Studies In Post-Traumatic Shock Disorder: Diagnosis, Treatment, and Legal Issues* (3rd Ed)., New Orleans, LA: Bruno Press; 1996.

Slone, Laurie, B., PhD. & Friedman, Matthew, J., MD., PhD. *After the War Zone: A Practical Guide For Returning Troops and Their Families.* Philadelphia, PA: Da Capo Press; 2008.

Tanielian, Terri & Jaycox, Lisa H. eds. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. RAND; Center for Military Health Policy Research; California Community Foundation. www.rand.org. 2008.